PROJECT EXCEL PROGRAM INFORMATION

Project EXCEL currently partners with 125 Indiana high schools and has over 300 approved Adjunct Faculty Members statewide.

Program:

- Project EXCEL offers over 135 courses, 41 of which are included in the Indiana CTL (Core Transfer Library).
- Project EXCEL courses fulfill the Core 40 with Academic Honors and Core 40 with Technical Honors diploma requirements.
- Project EXCEL courses include the same content as courses taught on the Vincennes University campus.
- Students are exposed to the rigor of college-level courses, thereby preparing them for university expectations.
- Students are taught in the high school they attend by teachers they know.
- Students may earn 15 hours of credit per semester through Project EXCEL.
- Students receive transcripted credit which can aid in the college application process, demonstrate college preparedness, and help students stay in college.
- Project EXCEL Adjunct Faculty receive professional development, have the opportunity to engage students in college level coursework, and receive a stipend based upon student enrollment.

Fees:

- Courses are available at only $25 per credit hour, a significant savings over traditional college tuition.
- Fees are currently being waived for all Technology courses and select Business/Public Service courses.
- Tuition and program fees are waived for students qualifying for Indiana's Free/Reduced lunch program.
- The cost of textbooks/materials is the responsibility of the student and/or the school corporation.

NOTE: Not all dual credit courses are listed. Only courses with a DOE match are listed below. For complete listing of Project EXCEL course, please contact Robyn Haase at 812-888-4086 or rhaase@vinu.edu.

For VU Project Excel ACCT 100 - Basic College Accounting

ACCOUNTING I 4524 (ACC I)

Accounting I is a business course that introduces the language of business using Generally Accepted Accounting Principles (GAAP) and procedures for proprietorships and partnerships using double-entry accounting. Emphasis is placed on accounting principles as they relate to both manual and automated financial systems. This course involves understanding, analyzing, and recording business transactions and preparing, analyzing, and interpreting financial reports as a basis for decision making. Instructional strategies should include the use of computers, projects, simulations, case studies, and business experiences requiring the application of accounting theories and principles.

ACCOUNTING II 4522 (ACC II)

Accounting II is an advanced-level business course that builds upon the Generally Accepted Accounting Principles (GAAP) and procedures learned in Accounting I. Emphasis are placed on managerial decisions made in corporate accounting, including in-depth analysis of financial statements. The importance of making ethical business decisions is emphasized. Instructional strategies must include the use of spreadsheets, word processing, and accounting software. Projects, simulations, case studies, and business experiences are used to apply accounting principles and produce appropriate financial reports.

For VU Project Excel AGBS 101 - Agribusiness Industries

AGRIBUSINESS MANAGEMENT 5002 (AG BUS MGMT) CIP Code: 01.0102

Agribusiness Management is a yearlong course that presents the concepts necessary for managing an agriculture-related business from a local and global perspective. Concepts covered in the course include: exploring careers in agribusiness, global visioning, applying Ecommerce, risk management, understanding business management and structures, entrepreneurship, the planning, organizing, financing, and operation of an agribusiness, economic principles, credit, computerized record keeping, budgeting, fundamentals of cash flow, federal, state, property and sales tax, insurance, cooperatives, purchasing, the utilization of information technology in agribusiness, marketing agricultural products, developing a marketing plan, advertising and selling products and services, understanding consumers and buying trends, agricultural law applications and employability skills.

For VU Project EXCEL ARCH 141 Introduction to Architectural CAD

Part of PLTW dual credit

CIVIL ENGINEERING AND ARCHITECTURE 5650 (CEA) CIP Code: 14.0401

This course should introduce students to the fundamental design and development aspects of civil engineering and architectural planning activities. Application and design principles will be used in conjunction with mathematical and scientific knowledge. Computer software programs should allow students opportunities to design, simulate, and evaluate the construction of buildings and communities. During the planning and design phases, instructional emphasis should be placed on related transportation, water resource, and environmental issues. Activities should include the preparation of cost estimates as well as a review of regulatory procedures that would affect the project design. Only those schools having a signed agreement with the national Project Lead The Way organization can use this course title

For VU Project EXCEL CIMT 125 and 125L Introduction to Robotics/ Automation with Lab

COMPUTER INTEGRATED MANUFACTURING 5534 (CIM) CIP Code: 14.1901

Computer Integrated Manufacturing is a course that applies principles of rapid prototyping, robotics, and automation. This course builds upon the computer solid modeling skills developed in Introduction of Engineering Design. Students will use computer controlled rapid prototyping and CNC equipment to solve problems by constructing actual models of their three-dimensional designs. Students will also be introduced to the fundamentals of robotics and how this equipment is used in an automated manufacturing environment. Students will evaluate their design solutions using various techniques of analysis and make appropriate modifications before producing their prototypes. Only those schools having a signed agreement with the national Project Lead the Way organization can use this course title. Schools involved in Project Lead the Way should use this course title in lieu of the Technology Education course

For VU Project Excel AUTO 110 and 110L Transportation Electrical with Lab

MOBILE ELECTRONICS 5692 (MOBL ELECT) CIP Code: 46.0302

Mobile Electronics is a highly specialized course that focuses on vehicle electrical systems and installation techniques for a range of products that are in demand by consumers. Activities will focus on: charging and electrical systems; locating, testing and documenting wiring; advanced audio system installation; basic security installation; remote start installation; and navigation systems. Additional areas of study should include acoustical principles, series and parallel circuits, and wireless communications. Students should have opportunities to use hands-on labs, self-paced and facilitator instructed modules, and simulations that build skills in trouble shooting common problems. Students completing this course should be prepared for the Mobile Electronics Certified Professional exams valued by employers hiring for this specialty area. Additional levels of certification can be achieved by students continuing their education in a postsecondary technical program or on-the-job training programs.

For VU Project Excel BCST 120 Beginning Radio Production

RADIO/TV BROADCASTING/TELECOMMUNICATIONS 5986 (RTVB TELCOM) CIP Code: 09.0701 Radio and Television or 09.0702, Digital Communication and Media/Multimedia

Radio/TV Broadcasting/Telecommunications provides instruction to develop and enhance competencies in various communication, marketing, media, production, and technical functions and tasks performed by employees, including management personnel, in radio/TV broadcasting and telecommunications occupations. Emphasis is placed on career opportunities, production, programming, promotion, sales, announcing, broadcast equipment operation, news and sports casting, broadcast regulations and laws, station organization, technical oral/written communication, and listening skills. Instructional strategies may include a hands-on school based enterprise, real and/or simulated occupational experiences, such as the operation of an in-school radio, television, telecommunications, or distance learning studio, job shadowing, field trips, and internships.

For VU Project Excel BCST 140 Beginning Television Production

RADIO/TV BROADCASTING/TELECOMMUNICATIONS 5986 (RTVB TELCOM) CIP Code: 09.0701 Radio and Television or 09.0702, Digital Communication and Media/Multimedia

Radio/TV Broadcasting/Telecommunications provides instruction to develop and enhance competencies in various communication, marketing, media, production, and technical functions and tasks performed by employees, including management personnel, in radio/TV broadcasting and telecommunications occupations. Emphasis is placed on career opportunities, production, programming, promotion, sales, announcing, broadcast equipment operation, news and sports casting, broadcast regulations and laws, station organization, technical oral/written communication, and listening skills. Instructional strategies may include a hands-on school based enterprise, real and/or simulated occupational experiences, such as the operation of an in-school radio, television, telecommunications, or distance learning studio, job shadowing, field trips, and internships.

For VU Project Excel BODY 100 and 100 L Body Repair I with Lab

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY 5514 (ACR TECH) CIP Code: 47.0603

Automotive Collision Repair Technology includes classroom and laboratory experiences concerned with all phases of the repair of damaged vehicle bodies and frames, including metal straightening; smoothing areas by filing, grinding, or sanding; concealment of imperfections; painting; and replacement of body components including trim. Instruction should also emphasize computerized frame diagnosis, computerized color-mixing, and computerized estimating of repair costs. Additional academic skills taught in this course include precision measurement and mathematical calibrations as well as scientific principles related to adhesive compounds, color-mixing, abrasive materials, metallurgy, and composite materials.

***A four to six credit course over two semesters

For VU Project EXCEL CMET 240 Computer Maintenance I

COMPUTER REPAIR AND MAINTENANCE TECHNOLOGY 5536 (COMP TECH) CIP Code: 47.0104

Computer Repair and Maintenance Technology prepares students to assemble, install, program, operate, maintain, service, and diagnose operational problems in computer systems. The course includes instruction in the underlying physical sciences and supporting mathematics of computer design, installation, construction, and programming operations. The curriculum also includes the study of electrical and electronic circuits and mechanical devices used in computer construction; their combination into systems in individual computers or networked installations; and, the instruments used to detect weaknesses or failure in electrical systems in computers. Course work will require extensive technical reading and the application of information retained from that reading. Language skills will be emphasized to improve students' abilities to efficiently and effectively communicate technical information to customers. Course content standards should prepare students to take industry certification exams in one or more areas of computer repair.

For VU Project Excel COMP 107 Web Page Design

WEB DESIGN 4574 (WEB DESIGN)

Web Design is a business course that provides instruction in the principles of web design using HTML/XHTML and current/emerging software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration, and publishing. Instructional strategies should include peer teaching, collaborative instruction, project-based learning activities, and school and community projects.

For VU Project Excel COMP 110 Introduction to Computer Concepts

COMPUTER APPLICATIONS 4530 (COMP APPS)

Computer Applications is a business course that provides instruction in software concepts using a Windows-based professional suite, which includes word processing, spreadsheet, database, graphics, and presentation applications. Instruction in basic computer hardware and operating systems that support software applications is provided. Additional concepts and applications dealing with software integration, Internet use, and information about future technology trends are included. Instructional strategies should include teacher demonstrations, collaborative instruction, interdisciplinary and/or culminating projects, problem-solving and critical-thinking activities, simulations, and minibaskets/in-basket projects.

For VU Project Excel COMP 113 Advanced Web Page Design

WEB DESIGN 4574 (WEB DESIGN)

Web Design is a business course that provides instruction in the principles of web design using HTML/XHTML and current/emerging software programs. Areas of instruction include audience analysis, hierarchy layout and design techniques, software integration, and publishing. Instructional strategies should include peer teaching, collaborative instruction, project-based learning activities, and school and community projects.

For VU Project Excel COMP 175 Principles of Program Design and QuickBasic

COMPUTER SCIENCE A, ADVANCED PLACEMENT 4570 (COMP SCI AP)

Computer Science A, Advanced Placement is a business course that provides students with the content established by the College Board. Topics include: object-oriented program design, program implementation, program analysis, standard data structures, standard algorithms, and computing in context. Computer Science A emphasizes object-oriented programming methodology with a concentration on problem solving and algorithm development.

For VU Project Excel COMP 176 Introduction to Visual Programming

COMPUTER PROGRAMMING 4534 (COMP PROG)

Computer Programming is a business course that introduces students to computer programming using various languages. Throughout the course, information regarding programming-related careers and career/educational paths are provided. Logical thinking processes are required for problem analysis and solving. Instructional strategies should include project based activities, in-baskets, minibaskets, and LAPS, which expose students to workplace scenarios that require the development/programming of simple applications

For VU Project Excel COSM 100, 150, 200, 250 Cosmetology I, II, III, IV

COSMETOLOGY 5802 (CSMTLGY) CIP Code: 12.0401

Cosmetology includes classroom and practical experiences concerned with a variety of beauty treatments, including the beautification of hair and skin care. Instruction includes training in giving shampoos, rinses, and scalp treatments; hair styling, setting, cutting, dyeing, tinting, bleaching, and fitting wigs; permanent waving; facials; manicuring; and, hand and arm massaging. Scientific knowledge related to bacteriology, anatomy, hygiene, and sanitation will be emphasized. Additional instruction in the areas of small business (salon) management, record keeping, and customer relations should also be provided in this course. Instruction should be designed to qualify students for the licensing examination.

For VU Project Excel CPNS 101 LAN Basics and OSI Model

INFORMATION TECHNOLOGY: NETWORK SYSTEMS 5234 (IT NET SYST) CIP Code: 11.0901

Computer Systems Networking and Telecommunications Information Technology: Network Systems is a career and technical education business and information technology course that will prepare students for careers in business and industry working with network systems. Students will acquire skills needed to plan, design, install, maintain, and manage network solutions used in business and industry. Students will develop an understanding of IT professionalism including the importance of ethics, communication skills, and knowledge of the "virtual workplace." Skills acquired will assist students in obtaining related networking systems certifications; e.g., A+, Cisco CCNA and CCNP, Security+, Network+, Novell CNA and CNE, Microsoft MCSE, etc. Essential skill areas include but are not limited to: Computer Hardware Maintenance; Network Operations; Network Administration; Basic Network Design Theory; Network Troubleshooting; Network Security; and Wireless Communications.

*** A two- to eight-credit course over two to eight semesters

For VU Project Excel CULN 110 Quantity Food Production

CULINARY ARTS FOUNDATIONS 5438 (CULART FND) CIP Code: 12.0503

Culinary Arts Foundations is an exploratory course for students considering career pathways related to culinary arts. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of individual and family issues. Topics safety, sanitation, storage and recycling processes in the industry; impacts of science and technology on the industry; and culinary arts career pathways. Students are able to explore this industry in depth and examine their own career goals in light of their findings. Laboratory experiences that emphasize industry practices and develop basic industry skills are required components of this course. Students are expected to prepare for and obtain state-approved food handler certification. This course is recommended for all students regardless of their career cluster or pathway, in order to build basic culinary arts knowledge and skills. It is especially appropriate for students with interest in career clusters related to culinary arts and food and nutrition. This course is recommended as a core component of the four-year career plans for the career clusters of agriculture, food & natural resources; hospitality & tourism; education & training; and human services.

For VU Project Excel DESL 130 and 130L Diesel Engine Systems with Lab

DIESEL SERVICE TECHNOLOGY 5620 (DIESL TECH) CIP Code: 47.0605

Diesel Service Technology includes classroom and laboratory experiences concerned with all phases of repair work on diesel engines used to power buses, ships, trucks, railroad trains, electrical generators, construction machinery, and similar equipment. Instruction and practice is provided in the diagnostics and repair of engines, brakes, electrical/electronic systems, suspension and steering. Students will demonstrate performance of these tasks as defined by ASE/NATEF standards. Use of technical manuals, hand and power tools and of testing and diagnostic equipment are also studied in the course. Advanced mathematical skills will be reinforced through precision measuring activities and estimation/calculation exercises. Scientific principles covered in this course include viscosity, friction, thermal expansion, and compound solutions. Written and oral communication skills will also be stressed to improve students' abilities to work with colleagues, customers, and supervisors.

For VU Project Excel DRAF 101 Introduction to Drafting

Part of PLTW dual credit

DESIGN PROCESSES 4794 (DES PROC)

Design Processes is a course that specializes in modern design and engineering processes with a focus on creative problem solving in developing, engineering, testing, and communicating designs for products, structures, and systems. Classroom activities help students to understand the steps used to move an idea from a designer's mind into an engineered artifact, process, or system. Students will participate in design activities using critical thinking skills that require them to: identify problems; generate alternative solutions; select and refine the most plausible solution; develop specifications for the solution; model and test the solution; and present the final solution for approval.

For VU Project Excel DRAF 120 Computers for Technology

COMMUNICATION SYSTEMS 4780 (COMM SYST)

Communication Systems is a course that specializes in how people use modern communication systems to exchange information and ideas. These systems allow people to grow intellectually, express feelings, and better understand diverse cultures. This course explores the application of the tools, materials, and techniques used to design, produce, use, and asses systems of communication. Instructional strategies introduce students to the world of communication technology through a variety of means including: presentations, discussions, and laboratory activities. Students will produce graphic and electronic media as they apply communication technologies. Most activities are designed for small group work since communication takes place between two parties or machines.

For VU Project Excel DRAF 140 Introduction to CAD

Part of PLTW dual credit

COMPUTERS IN DESIGN AND PRODUCTION SYSTEMS 4800 (COMP DES)

Computers in Design and Production Systems is a course that specializes in using modern technological processes, computers, design, and production systems in the production of products and structures through the use of automated production systems. Emphasis is placed on using modern technologies and on developing career related skills. The content

and activities should be developed locally in accordance with available advanced technologies in the school. Course content should address major technological content related to topics such as: design documentation using CAD systems; assignments involving the interface of CAD, CAM, and CIM technologies; computer simulation of products and systems; animation and related multimedia applications; control technologies; and automation in the modern workplace.

For VU Project EXCEL ELEC 100 Basic Electricity & Electronics

INTEGRATED ELECTRONIC TECHNOLOGIES 5690 (INT EL TECH) CIP Code: 46.0302

Integrated Electronic Technologies is a course of study based on the scientific principles of electricity and the basic theories of electronics, basic circuit analysis, and digital technologies. Activities should focus on consumer electronic products and the skills needed to install, maintain, and trouble shoot hardware and software acquisitions. Students should also participate in activities that build customer relations and interpersonal skills for possible employment in the following areas: technical help desks and call centers; retail sales; consumer education; and repair service. Emphasis will be placed on the ability to read, comprehend, and use information found in technical manuals. Students completing this course of study should be prepared for an industry exam in electronics or a specialty area associated with consumer products.

For VU Project EXCEL ELEC 110 Basic Component & Circuit Analysis

ELECTRONICS TECHNOLOGY 5684 (ELECT TECH) CIP Code: 47.0101

Electronics Technology is a course that includes classroom and laboratory experiences in wiring and schematic diagrams used to design, install, and repair electrical/electronic equipment such as wireless communication devices, programmable controllers, consumer electronic products, amplifiers, computers, and related equipment. Course content will include basic theories of electricity, electronics, digital technology, and basic circuit analysis. Activities include experiences in: soldering; use of an oscilloscope, meters, signal generators and tracers; breadboarding; circuit simulation software; and troubleshooting. Understanding and using the underlying scientific principles related to electricity, electronics, circuits, sine waves, and Ohm's Law are integral to this course. Students will use mathematical principles to solve electronic problems and to troubleshoot electrical circuits. Emphasis will be placed on the ability to read, comprehend, and use information found in technical manuals.

For VU Project Excel ELEC 130 Digital Logic I

Part of PLTW dual credit

DIGITAL ELECTRONICS TECHNOLOGY 5538 (DE or DIG EL TECH) CIP Code: 15.0303

Digital Electronics Technology is a course of study in applied digital logic that encompasses the design and application of electronic circuits and devices found in video games, watches, calculators, digital cameras, and thousands of other devices. Instruction includes the application of engineering and scientific principles as well as the use of Boolean algebra to solve design problems. Using computer software that reflects current industry standards, activities should provide opportunities for students to design, construct, test, and analyze simple and complex digital circuitry.

For VU Project EXCEL EMTB 212 Emergency Medical Technician – Basic

INTRODUCTION TO EMERGENCY MEDICAL SERVICES 5210 (INTRO EMS) CIP Code: 51.0904

Introduction to Emergency Medical Services prepares students for State Certification as a First Responder which could lead to a career in Emergency Medical Services such as an Emergency Medical Technician or a Paramedic. A variety of instructional strategies and technologies will be used to teach students about emergency medical service operations, personal and scene safety, scene and patient assessment, and patient care. Students have the opportunity to develop first responder skills in simulated situations. Participation in HOSA affords the student the opportunity to compete in a variety of competitive events, specifically CPR/First Aid and EMT, at both the state and national level.

For VU Project Excel FIRE 100 Intro. to the Fire Service

FIRE SCIENCE 5820 (FIRE SCI) CIP Code: 43.0203

Fire Science training includes instruction in the chemistry of fire; the use of water and other materials in fighting fires; the various kinds of firefighting equipment such as extinguishers, pumps, hoses, ropes, ladders, gas masks, hydrants, and standpipe and sprinkler systems; methods of entry; rescue principles, practices, and equipment; salvage practices and equipment; fire and arson investigation; and, inspection techniques. Additional training in chemical and radiation hazards and methods designed to ensure community safety and effective clean-ups can be incorporated in this area.

*** A four to six credit course over two semesters.

For VU Project Excel FIRE 101 Fire Protection Systems, Prevention & Education

FIRE SCIENCE 5820 (FIRE SCI) CIP Code: 43.0203

Fire Science training includes instruction in the chemistry of fire; the use of water and other materials in fighting fires; the various kinds of firefighting equipment such as extinguishers, pumps, hoses, ropes, ladders, gas masks, hydrants, and standpipe and sprinkler systems; methods of entry; rescue principles, practices, and equipment; salvage practices and equipment; fire and arson investigation; and, inspection techniques. Additional training in chemical and radiation hazards and methods designed to ensure community safety and effective clean-ups can be incorporated in this area.

*** A four to six credit course over two semesters.

For VU Project Excel HIMT 110 Medical Terminology -Allied Health

MEDICAL TERMINOLOGY 5274 (MED TERMS) CIP Code: 51.1199

Medical Terminology prepares students with language skills necessary for effective, independent use of health and medical reference materials. It includes the study of health and medical abbreviations, symbols, and Greek and Latin word part meanings taught within the context of body systems. This course builds skills in pronouncing, spelling, and defining new words encountered in verbal or written information. Students have the opportunity to acquire skills in interpreting medical records and communications accurately and logically. Materials should invite students to enjoy and be curious about words in their work and

personal lives, thus serving as a foundation for enlarging personal vocabularies. The HOSA organization provides students the opportunity to compete in a wide variety of competitive events at both the state and national level.

For VU Project Excel HOTL 241 Hospitality Customer Services

CONSUMER SERVICES CAREERS I, II 5430 (CSC I, II) CIP Code: 19.0403

Consumer Services Careers prepares students for employment in consumer services and related services and provides the foundations for study in higher education that leads to consumer services-related careers. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of consumer services careers. The course of study includes, but is not limited to: management of personal, family, and social needs and individual and family resources; processes and systems for achieving and maintaining financially responsible living arrangements, including financing options and tax considerations; contemporary housing issues, including homelessness; environmental and energy issues; impacts of technology on home and family resources; resource management to meet special needs; and employability skills. Ethical, legal, and safety issues as well as helping processes and collaborative ways of working with others are to be addressed. Intensive experiences in one or more consumer services agencies, resumes, and career portfolios are required components. A standards-based plan for each student guides the student's laboratory/field experiences. Students are monitored in their laboratory/field experiences by the Consumer Services Careers teacher. Articulation with postsecondary programs is encouraged.

For VU Project EXCEL HORT 105 Introduction to Landscape Horticulture

LANDSCAPE MANAGEMENT 5136 (LAND MGMT) CIP Code: 01.0605

Landscape Management is a yearlong course that provides the student with an overview of the many career opportunities in the diverse field of landscape management. Students are introduced to the procedures used in the planning and design of a landscape using current technology practices, the principles and procedures involved with landscape construction, the determination of maintenance schedules, communications, management and employability skills necessary in landscaping operations, and the care and use of equipment utilized by landscapers. Upon completion of the program plus learning and demonstrating other skills, students have the opportunity to receive an industry approved State Certificate of Mastery in Landscape Management.

For VU Project Excel LAWE 100 Survey Of Criminal Justice

LAW EDUCATION 1526 (LAW ED)

Law Education provides an understanding of the American legal system and its basis in the United States Constitution. The course is designed to promote an understanding of society and its system of laws by indicating how citizens may effectively function within the law. Ways of dealing with interpersonal conflict in order to secure constructive change are included, along with the development of critical thinking and problem solving skills. Case studies, field trips, simulations, and mock trials will be used in this course whenever feasible.

For VU Project Excel LAWE 106 Introduction to Traffic Control

LAW ENFORCEMENT 5822 (LAW ENFORC) CIP Code: 43.0107

Law Enforcement includes specialized classroom and practical experiences related to public

safety occupations such as law enforcement, loss protection services, and homeland security. Training is based on standards and content similar to that provided by officially designated law enforcement agencies. Instruction includes procedures for patrolling on foot or in an automobile during the day or at night; dealing with misdemeanors, felonies, traffic violations, and accidents; investigative and evidence collection procedures; making arrests; and testifying in court. Students will have opportunities to use mathematical skills in crash reconstruction and analysis activities requiring measurements and performance of speed/acceleration calculations. Additional activities simulating criminal investigations will be used to teach scientific knowledge related to anatomy, biology, and chemistry. Oral and written communication skills should be reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports.

*** A four to six credit course over two semesters.

For VU Project EXCEL LAWE 150 Introduction to Criminology

LAW ENFORCEMENT 5822 (LAW ENFORC) CIP Code: 43.0107

Law Enforcement includes specialized classroom and practical experiences related to public safety occupations such as law enforcement, loss protection services, and homeland security. Training is based on standards and content similar to that provided by officially designated law enforcement agencies. Instruction includes procedures for patrolling on foot or in an automobile during the day or at night; dealing with misdemeanors, felonies, traffic violations, and accidents; investigative and evidence collection procedures; making arrests; and testifying in court. Students will have opportunities to use mathematical skills in crash reconstruction and analysis activities requiring measurements and performance of speed/acceleration calculations. Additional activities simulating criminal investigations will be used to teach scientific knowledge related to anatomy, biology, and chemistry. Oral and written communication skills should be reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports.

*** A four to six credit course over two semesters.

For VU Project Excel LAWE 160 Criminal Investigation

LAW ENFORCEMENT 5822 (LAW ENFORC) CIP Code: 43.0107

Law Enforcement includes specialized classroom and practical experiences related to public safety occupations such as law enforcement, loss protection services, and homeland security. Training is based on standards and content similar to that provided by officially designated law enforcement agencies. Instruction includes procedures for patrolling on foot or in an automobile during the day or at night; dealing with misdemeanors, felonies, traffic violations, and accidents; investigative and evidence collection procedures; making arrests; and testifying in court. Students will have opportunities to use mathematical skills in crash reconstruction and analysis activities requiring measurements and performance of speed/acceleration calculations. Additional activities simulating criminal investigations will be used to teach scientific knowledge related to anatomy, biology, and chemistry. Oral and written communication skills should be reinforced through activities that model public relations and crime prevention efforts as well as the preparation of police reports.
*** A four to six credit course over two semesters.

For VU Project Excel MCOM 102 Audio/Video Production for Non-Broadcasting

RADIO/TV BROADCASTING/TELECOMMUNICATIONS 5986 (RTVB TELCOM) CIP Code: 09.0701 Radio and Television or 09.0702, Digital Communication and Media/Multimedia

Radio/TV Broadcasting/Telecommunications provides instruction to develop and enhance competencies in various communication, marketing, media, production, and technical functions and tasks performed by employees, including management personnel, in radio/TV broadcasting and telecommunications occupations. Emphasis is placed on career opportunities, production, programming, promotion, sales, announcing, broadcast equipment operation, news and sports casting, broadcast regulations and laws, station organization, technical oral/written communication, and listening skills. Instructional strategies may include a hands-on school-based enterprise, real and/or simulated occupational experiences, such as the operation of an in-school radio, television, telecommunications, or distance learning studio, job shadowing, field trips, and internships.

For VU Project Excel MGMT 100 Introduction to Business

BUSINESS, MANAGEMENT, AND FINANCE 5268 (BUS MT FIN) CIP Code: 52.0304 Accounting and Finance; 52.0305 Accounting and Business/Management; 52.0703 Small Business Administration/Management; 52.0901 Hospitality Administration/Management; 52.1908 Business and Personal/Financial Services Marketing Operations (Based on Student's Career Pathway)

Business, Management, and Finance is a career and technical education business course that prepares students to plan, organize, direct, and control the functions and processes of a firm or organization and to perform business-related functions. Students are provided opportunities to develop attitudes and apply skills and knowledge in the areas of business administration, management, and finance. Individual experiences will be based upon the student's career and educational goals. Instructional strategies should include in-baskets, minibaskets, LAPS, field trips, guest speakers, Internet searches, simulations, internships, and cooperative ventures between school and community. Business Professionals of America (BPA) or DECA, An Association of Marketing Students, are the co-curricular organizations associated with this course, which provide students with the opportunity to participate/compete in business-related activities.

***Credits: A two- to eight-credit course over two to eight semesters

For VU Project Excel MTTD 135 and MTTD 135L Manufacturing Processes with Lab

MANUFACTURING PROCESSES 4796 (MFTG PROC)

Manufacturing Processes is a course that specializes in using modern manufacturing processes to obtain resources and change them into industrial materials, industrial products and consumer products. Activities provide an understanding of the characteristics and properties of industrial materials and the processing of these materials into consumer goods. Students will investigate the properties of engineered materials such as: metallics; polymers; ceramics; and composites. After gaining a working knowledge of these materials, students will study six major types of material processes: casting and molding; forming; separating; conditioning; finishing; and assembling. In this course, each of these processes is a major body of content. It is through the study of common principles, supported by

related laboratory and problem solving activities, that understanding is developed and reinforced.

For VU Project Excel PRNT 101 and 101L Introduction to Traditional & Digital Photography with Lab

COMMERCIAL PHOTOGRAPHY 5570 (COMM PHOTO) CIP Code: 50.0406
Commercial Photography is an organized learning experience that includes theory, laboratory, and studio work as each relates to all phases of camera use and photographic processing. Instruction covers the topics of composition and color dynamics; contact printing and enlarging; developing film; lighting techniques and meters; large and medium format cameras and other current photographic equipment used for portrait, commercial, and industrial photography. Instruction emphasizes the planning, development, and production of materials that visually communicate ideas and information.

*** A four to six credit course over two semesters.

For VU Project Excel PRNT 105 and 105L Survey of Printing Techniques and Lab

GRAPHIC IMAGING TECHNOLOGY 5572 (GRAPH TECH) CIP Code: 10.0305
Graphic Imaging Technology will include organized learning experiences that focus on theory and laboratory activities in pre-press, press and finishing operations. Emphasis will be placed on elements of design and layout leading to computerized electronic image generation, plate preparation, pressroom operations, and finishing techniques. Instructional activities will enhance student's language arts skills through the use of proofreading, spelling, and punctuation exercises. The course will include actual production processes in conjunction with classroom assignments embracing the technologies of printing, publishing, packaging, electronic imaging, and their allied industries.

** A four to six credit course over two semesters.

For VU Project Excel PRNT 107 and 107L Principles of Layout with Lab

GRAPHIC IMAGING TECHNOLOGY 5572 (GRAPH TECH) CIP Code: 10.0305
Graphic Imaging Technology will include organized learning experiences that focus on theory and laboratory activities in pre-press, press and finishing operations. Emphasis will be placed on elements of design and layout leading to computerized electronic image generation, plate preparation, pressroom operations, and finishing techniques. Instructional activities will enhance student's language arts skills through the use of proofreading, spelling, and punctuation exercises. The course will include actual production processes in conjunction with classroom assignments embracing the technologies of printing, publishing, packaging, electronic imaging, and their allied industries.

*** A four to six credit course over two semesters.

For VU Project Excel PRNT 155 and 155L Computer Aided Publishing with Lab

COMMERCIAL ART AND GRAPHIC DESIGN 5550 (COM ART DES) CIP Code: 50.0402

Commercial Art and Graphic Design includes organized learning experiences that incorporate a variety of visual art techniques as they relate to the design and execution of layouts and illustrations for advertising, displays, promotional materials, and instructional manuals. Instruction also covers advertising theory and preparation of copy, lettering, posters, and artwork in addition to incorporation of photographic images. Communication skills will be emphasized through the study of effective methods used to design commercial products that impart information and ideas. Advanced instruction might also include experiences in silk screening and air brush techniques as well as activities in designing product packaging and commercial displays or exhibits.

*** A four to six credit course over two semesters

For VU Project Excel REST 155 Quantity Food Purchasing

CULINARY ARTS FOUNDATIONS 5438 (CULART FND) CIP Code: 12.0503

Culinary Arts Foundations is an exploratory course for students considering career pathways related to culinary arts. A project-based approach that utilizes higher order thinking, communication, leadership, and management processes is recommended in order to integrate suggested topics into the study of individual and family issues. Topics safety, sanitation, storage and recycling processes in the industry; impacts of science and technology on the industry; and culinary arts career pathways. Students are able to explore this industry in depth and examine their own career goals in light of their findings. Laboratory experiences that emphasize industry practices and develop basic industry skills are required components of this course. Students are expected to prepare for and obtain state-approved food handler certification. This course is recommended for all students regardless of their career cluster or pathway, in order to build basic culinary arts knowledge and skills. It is especially appropriate for students with interest in career clusters related to culinary arts and food and nutrition. This course is recommended as a core component of the four-year career plans for the career clusters of agriculture, food & natural resources; science, engineering & information technology; education & training; and personal & commercial services.

For VU Project EXCEL SURV 181 Site Surveying and Planning

Part of PLTW dual credit

There is no DOE course comparison for SURV 181.

For VU Project Excel WELD 160 General Welding

WELDING TECHNOLOGY 5776 (WELD TECH) CIP Code: 48.0508

Welding Technology includes classroom and laboratory experiences that develop a variety of skills detailed in American Welding Society (AWS) Entry Level Guidelines and Certifications. Areas of study include electric welding and flame and plasma cutting. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld industrial metals in four basic welding positions. Reinforcement of mathematical skills in geometry, precision measurement, and estimation will be part of the daily instruction. Understanding the principles of metallurgy, gases, and materials science is integral to this course.

*** A four to six credit course over two semesters.

For VU Project Excel WELD 165 Advanced General Welding

WELDING TECHNOLOGY 5776 (WELD TECH) CIP Code: 48.0508

Welding Technology includes classroom and laboratory experiences that develop a variety of skills detailed in American Welding Society (AWS) Entry Level Guidelines and Certifications. Areas of study include electric welding and flame and plasma cutting. Instructional activities emphasize properties of metals, safety issues, blueprint reading, electrical principles, welding symbols, and mechanical drawing through projects and exercises that teach students how to weld industrial metals in four basic welding positions. Reinforcement of mathematical skills in geometry, precision measurement, and estimation will be part of the daily instruction. Understanding the principles of metallurgy, gases, and materials science is integral to this course.

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